

Sequence Listing

<110> Baker, Kevin  
Botstein, David  
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Godowski, Paul  
Grimaldi, Christopher  
Gurney, Austin  
Hillan, Kenneth  
Kljavin, Ivar  
Napier, Mary  
Roy, Margaret  
Tumas, Daniel  
Wood, William

<120> SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC ACIDS ENCODING THE SAME

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<213> Artificial Sequence

<220>  
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<210> 11  
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<400> 11  
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<210> 12  
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<400> 12  
gtgctgcccc tccgttctga gaagga 26

<210> 13

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<220>  
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<400> 13  
gcagggtgct caaacaggac ac 22

<210> 14  
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<212> DNA  
<213> Homo Sapien

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ccggccggcc atgcagcccc gcccgcggca ggccgggggt ggcgcagctgc 150  
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<210> 15

<211> 737

<212> PRT

<213> Homo Sapien

<400> 15

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Ser	Ser	Leu	Ala	Asn	Pro	Val	Pro	Ala	Ala	Pro	Leu	Ser	Ala	Pro
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Gly	Pro	Cys	Ala	Ala	Gln	Pro	Cys	Arg	Asn	Gly	Gly	Val	Cys	Thr
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Ser	Arg	Pro	Glu	Pro	Asp	Pro	Gln	His	Pro	Ala	Pro	Ala	Gly	Glu
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Pro	Gly	Tyr	Ser	Cys	Thr	Cys	Pro	Ala	Gly	Ile	Ser	Gly	Ala	Asn
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Cys	Gln	Leu	Val	Ala	Asp	Pro	Cys	Ala	Ser	Asn	Pro	Cys	His	His
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Gly Asn Cys Ser Ser Ser Ser Ser Ser Asp Gly Tyr Leu

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Leu Pro Ser Leu Pro Ala Thr Gly Trp Thr Glu Ser Met Ala Pro		
140	145	150
Arg Gln Leu Gln Pro Val Pro Ala Thr Gln Glu Pro Asp Lys Ile		
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Leu Pro Arg Ser Gln Ala Thr Val Thr Leu Pro Thr Trp Gln Pro		
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Lys Thr Gly Gln Lys Val Val Glu Met Lys Trp Asp Gln Val Glu		
185	190	195
Val Ile Pro Asp Ile Ala Cys Gly Asn Ala Ser Ser Asn Ser Ser		
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Ala Gly Gly Arg Leu Val Ser Phe Glu Val Pro Gln Asn Thr Ser		
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Val Lys Ile Arg Gln Asp Ala Thr Ala Ser Leu Ile Leu Leu Trp		
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Lys Val Thr Ala Thr Gly Phe Gln Gln Cys Ser Leu Ile Asp Gly		
245	250	255
Arg Ser Val Thr Pro Leu Gln Ala Ser Gly Gly Leu Val Leu Leu		
260	265	270
Glu Glu Met Leu Ala Leu Gly Asn Asn His Phe Ile Gly Phe Val		
275	280	285
Asn Asp Ser Val Thr Lys Ser Ile Val Ala Leu Arg Leu Thr Leu		
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Val Val Lys Val Ser Thr Cys Val Pro Gly Glu Ser His Ala Asn		
305	310	315
Asp Leu Glu Cys Ser Gly Lys Gly Lys Cys Thr Thr Lys Pro Ser		
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Glu Ala Thr Phe Ser Cys Thr Cys Glu Glu Gln Tyr Val Gly Thr		
335	340	345
Phe Cys Glu Glu Tyr Asp Ala Cys Gln Arg Lys Pro Cys Gln Asn		
350	355	360
Asn Ala Ser Cys Ile Asp Ala Asn Glu Lys Gln Asp Gly Ser Asn		
365	370	375
Phe Thr Cys Val Cys Leu Pro Gly Tyr Thr Gly Glu Leu Cys Gln		
380	385	390
Ser Lys Ile Asp Tyr Cys Ile Leu Asp Pro Cys Arg Asn Gly Ala		
395	400	405

Thr Cys Ile Ser Ser Leu Ser Gly Phe Thr Cys Gln Cys Pro Glu  
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 Gly Tyr Phe Gly Ser Ala Cys Glu Glu Lys Val Asp Pro Cys Ala  
 425 430 435  
 Ser Ser Pro Cys Gln Asn Asn Gly Thr Cys Tyr Val Asp Gly Val  
 440 445 450  
 His Phe Thr Cys Asn Cys Ser Pro Gly Phe Thr Gly Pro Thr Cys  
 455 460 465  
 Ala Gln Leu Ile Asp Phe Cys Ala Leu Ser Pro Cys Ala His Gly  
 470 475 480  
 Thr Cys Arg Ser Val Gly Thr Ser Tyr Lys Cys Leu Cys Asp Pro  
 485 490 495  
 Gly Tyr His Gly Leu Tyr Cys Glu Glu Glu Tyr Asn Glu Cys Leu  
 500 505 510  
 Ser Ala Pro Cys Leu Asn Ala Ala Thr Cys Arg Asp Leu Val Asn  
 515 520 525  
 Gly Tyr Glu Cys Val Cys Leu Ala Glu Tyr Lys Gly Thr His Cys  
 530 535 540  
 Glu Leu Tyr Lys Asp Pro Cys Ala Asn Val Ser Cys Leu Asn Gly  
 545 550 555  
 Ala Thr Cys Asp Ser Asp Gly Leu Asn Gly Thr Cys Ile Cys Ala  
 560 565 570  
 Pro Gly Phe Thr Gly Glu Glu Cys Asp Ile Asp Ile Asn Glu Cys  
 575 580 585  
 Asp Ser Asn Pro Cys His His Gly Gly Ser Cys Leu Asp Gln Pro  
 590 595 600  
 Asn Gly Tyr Asn Cys His Cys Pro His Gly Trp Val Gly Ala Asn  
 605 610 615  
 Cys Glu Ile His Leu Gln Trp Lys Ser Gly His Met Ala Glu Ser  
 620 625 630  
 Leu Thr Asn Met Pro Arg His Ser Leu Tyr Ile Ile Ile Gly Ala  
 635 640 645  
 Leu Cys Val Ala Phe Ile Leu Met Leu Ile Ile Leu Ile Val Gly  
 650 655 660  
 Ile Cys Arg Ile Ser Arg Ile Glu Tyr Gln Gly Ser Ser Arg Pro  
 665 670 675  
 Ala Tyr Glu Glu Phe Tyr Asn Cys Arg Ser Ile Asp Ser Glu Phe  
 680 685 690  
 Ser Asn Ala Ile Ala Ser Ile Arg His Ala Arg Phe Gly Lys Lys

695 700 705

Ser Arg Pro Ala Met Tyr Asp Val Ser Pro Ile Ala Tyr Glu Asp  
710 715 720

Tyr Ser Pro Asp Asp Lys Pro Leu Val Thr Leu Ile Lys Thr Lys  
725 730 735

Asp Leu

<210> 16  
<211> 43  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 16  
tgtaaaacga cggccagttt aatagacctg caattattaa tct 43

<210> 17  
<211> 41  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 17  
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<210> 18  
<211> 508  
<212> DNA  
<213> Homo Sapien

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acgaaagtgt gacccccc tt tcaggctt tc agggggactg gtccctcctgg 100  
aggagatgtt cgccttgggg aataatca ttattggttt tgtgaatgtat 150  
tctgtgacta agtctattgt ggctttgcgc ttaactctgg tggtaaggt 200  
cagcacctgt gtgccggggg agagtcacgc aaatgacttg gagtgttcag 250  
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gagggaaacct tgccaaaaca acgcgagctg tattgatgca aatgaaaagc 400  
aagatggagc caatttaccc tttgtttgcc ttccctggta tactggagag 450  
ctttgccaac cgaactgaga ttggagcgaa cgacctacac cgaactgaga 500

tagggag 508

<210> 19  
<211> 508  
<212> DNA  
<213> Homo Sapien

<400> 19  
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aggagatgtc cgccttgggg aataatcaact ttattggttt tggtaatgtat 150  
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aagatgggag caatttcacc tgtgttgcc ttcctgggta tactggagag 450  
cttgccaaac cgaactgaga ttggagcga cgacctacac cgaactgaga 500

tagggag 508

<210> 20  
<211> 23  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 20  
ctctggaagg tcacggccac agg 23

<210> 21  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 21  
ctcagttcgg ttggcaaagc tctc 24

<210> 22  
<211> 69  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 22

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gctttgccaa ccgaactga 69

<210> 23

<211> 1520

<212> DNA

<213> Homo Sapien

<400> 23

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gcccacacca tgccgggcac ctacgctccc tcgaccacac tcagtagtcc 150  
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cagcctggac aggcttagag atggcctcgat gggcgcccaag ttctggtcag 350  
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<210> 24

<211> 433

<212> PRT

<213> Homo Sapien

<400> 24

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20 25 30

Pro Leu Val Asp Gly His Asn Asp Leu Pro Leu Val Leu Arg Gln  
35 40 45

Val Tyr Gln Lys Gly Leu Gln Asp Val Asn Leu Arg Asn Phe Ser  
50 55 60

Tyr Gly Gln Thr Ser Leu Asp Arg Leu Arg Asp Gly Leu Val Gly  
65 70 75

Ala Gln Phe Trp Ser Ala Tyr Val Pro Cys Gln Thr Gln Asp Arg  
80 85 90

Asp Ala Leu Arg Leu Thr Leu Glu Gln Ile Asp Leu Ile Arg Arg  
95 100 105

Met Cys Ala Ser Tyr Ser Glu Leu Glu Leu Val Thr Ser Ala Lys  
110 115 120

Ala Leu Asn Asp Thr Gln Lys Leu Ala Cys Leu Ile Gly Val Glu  
125 130 135

Gly Gly His Ser Leu Asp Asn Ser Leu Ser Ile Leu Arg Thr Phe  
140 145 150

Tyr Met Leu Gly Val Arg Tyr Leu Thr Leu Thr His Thr Cys Asn  
155 160 165

Thr Pro Trp Ala Glu Ser Ser Ala Lys Gly Val His Ser Phe Tyr  
170 175 180

Asn Asn Ile Ser Gly Leu Thr Asp Phe Gly Glu Lys Val Val Ala  
185 190 195  
Glu Met Asn Arg Leu Gly Met Met Val Asp Leu Ser His Val Ser  
200 205 210  
Asp Ala Val Ala Arg Arg Ala Leu Glu Val Ser Gln Ala Pro Val  
215 220 225  
Ile Phe Ser His Ser Ala Ala Arg Gly Val Cys Asn Ser Ala Arg  
230 235 240  
Asn Val Pro Asp Asp Ile Leu Gln Leu Leu Lys Lys Asn Gly Gly  
245 250 255  
Val Val Met Val Ser Leu Ser Met Gly Val Ile Gln Cys Asn Pro  
260 265 270  
Ser Ala Asn Val Ser Thr Val Ala Asp His Phe Asp His Ile Lys  
275 280 285  
Ala Val Ile Gly Ser Lys Phe Ile Gly Ile Gly Gly Asp Tyr Asp  
290 295 300  
Gly Ala Gly Lys Phe Pro Gln Gly Leu Glu Asp Val Ser Thr Tyr  
305 310 315  
Pro Val Leu Ile Glu Glu Leu Leu Ser Arg Gly Trp Ser Glu Glu  
320 325 330  
Glu Leu Gln Gly Val Leu Arg Gly Asn Leu Leu Arg Val Phe Arg  
335 340 345  
Gln Val Glu Lys Val Gln Glu Glu Asn Lys Trp Gln Ser Pro Leu  
350 355 360  
Glu Asp Lys Phe Pro Asp Glu Gln Leu Ser Ser Ser Cys His Ser  
365 370 375  
Asp Leu Ser Arg Leu Arg Gln Arg Gln Ser Leu Thr Ser Gly Gln  
380 385 390  
Glu Leu Thr Glu Ile Pro Ile His Trp Thr Ala Lys Leu Pro Ala  
395 400 405  
Lys Trp Ser Val Ser Glu Ser Ser Pro His Met Ala Pro Val Leu  
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425 430

<210> 25  
<211> 22  
<212> DNA

<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 25  
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<210> 26  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 26  
cgtgatggtg tctttgtcca tggg 24

<210> 27  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 27  
ctccaccaat cccgatgaac ttgg 24

<210> 28  
<211> 50  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 28  
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<210> 29  
<211> 1416  
<212> DNA  
<213> Homo Sapien

<400> 29  
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gccctgatgc gggacttccc gctcgtggac ggccacaacg acctgcccct 200  
ggtcctaagg caggttacc agaaaggct acaggatgtt aacctgcgca 250  
atttcagcta cggccagacc agcctggaca ggcttagaga tggcctcg 300  
ggcgcccaagt tctggtcagc ctatgtgcca tgccagaccc aggaccgg 350  
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cctcttattc tgagctggag cttgtgacct cggctaaagc tctgaacgac 450  
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caatagcctc tccatcttac gtaccttcta catgctggga gtgcgtacc 550  
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tccgacctct cacgtctgcg tcagagacag agtctgactt cagggccagga 1250  
actcaactgag attcccatac actggacagc caagttacca gccaagtgg 1300  
cagtcctcaga gtcctccccc caccctgaca aaactcacac atgcccaccc 1350  
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aaaaccccaag gacacc 1416

<210> 30  
<211> 446  
<212> PRT  
<213> Homo Sapien

<400> 30  
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Thr Gln Gly Leu Gln Glu Gln Ala Arg Ala Leu Met Arg Asp Phe  
20 25 30  
Pro Leu Val Asp Gly His Asn Asp Leu Pro Leu Val Leu Arg Gln  
35 40 45  
Val Tyr Gln Lys Gly Leu Gln Asp Val Asn Leu Arg Asn Phe Ser

50	55	60
Tyr Gly Gln Thr Ser Leu Asp Arg Leu Arg Asp Gly Leu Val Gly		
65	70	75
Ala Gln Phe Trp Ser Ala Tyr Val Pro Cys Gln Thr Gln Asp Arg		
80	85	90
Asp Ala Leu Arg Leu Thr Leu Glu Gln Ile Asp Leu Ile Arg Arg		
95	100	105
Met Cys Ala Ser Tyr Ser Glu Leu Glu Leu Val Thr Ser Ala Lys		
110	115	120
Ala Leu Asn Asp Thr Gln Lys Leu Ala Cys Leu Ile Gly Val Glu		
125	130	135
Gly Gly His Ser Leu Asp Asn Ser Leu Ser Ile Leu Arg Thr Phe		
140	145	150
Tyr Met Leu Gly Val Arg Tyr Leu Thr Leu Thr His Thr Cys Asn		
155	160	165
Thr Pro Trp Ala Glu Ser Ser Ala Lys Gly Val His Ser Phe Tyr		
170	175	180
Asn Asn Ile Ser Gly Leu Thr Asp Phe Gly Glu Lys Val Val Ala		
185	190	195
Glu Met Asn Arg Leu Gly Met Met Val Asp Leu Ser His Val Ser		
200	205	210
Asp Ala Val Ala Arg Arg Ala Leu Glu Val Ser Gln Ala Pro Val		
215	220	225
Ile Phe Ser His Ser Ala Ala Arg Gly Val Cys Asn Ser Ala Arg		
230	235	240
Asn Val Pro Asp Asp Ile Leu Gln Leu Leu Lys Lys Asn Gly Gly		
245	250	255
Val Val Met Val Ser Leu Ser Met Gly Val Ile Gln Cys Asn Pro		
260	265	270
Ser Ala Asn Val Ser Thr Val Ala Asp His Phe Asp His Ile Lys		
275	280	285
Ala Val Ile Gly Ser Lys Phe Ile Gly Ile Gly Gly Asp Tyr Asp		
290	295	300
Gly Ala Gly Lys Phe Pro Gln Gly Leu Glu Asp Val Ser Thr Tyr		
305	310	315
Pro Val Leu Ile Glu Glu Leu Leu Ser Arg Gly Trp Ser Glu Glu		
320	325	330
Glu Leu Gln Gly Val Leu Arg Gly Asn Leu Leu Arg Val Phe Arg		
335	340	345

Gln Val Glu Lys Val Gln Glu Glu Asn Lys Trp Gln Ser Pro Leu  
 350 355 360

Glu Asp Lys Phe Pro Asp Glu Gln Leu Ser Ser Ser Cys His Ser  
 365 370 375

Asp Leu Ser Arg Leu Arg Gln Arg Gln Ser Leu Thr Ser Gly Gln  
 380 385 390

Glu Leu Thr Glu Ile Pro Ile His Trp Thr Ala Lys Leu Pro Ala  
 395 400 405

Lys Trp Ser Val Ser Glu Ser Ser Pro His Pro Asp Lys Thr His  
 410 415 420

Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser  
 425 430 435

Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr  
 440 445

<210> 31  
<211> 1790  
<212> DNA  
<213> Homo Sapien  
  
<400> 31  
cgccccagcga cgtgcggggcg gcctggcccg cgccctcccg cgcccgccct 50  
gcgtcccgcg ccctgcgcaca ccggccgcga gccgcagccc gccgcgcgc 100  
cccgccagcg ccggccccat gcccgcggc cgccggggcc ccgcgcgc 150  
atccgcgcgg cggccgcgc cgttgctgcc cctgctgctg ctgctctgcg 200  
tcctcggggc gccgcgagcc ggatcaggag cccacacagc tgtgatcagt 250  
ccccaggatc ccacgcttct catcggtctcc tccctgctgg ccacactgtc 300  
agtgcacgga gacccaccag gagccaccgc cgagggcctc tactggaccc 350  
tcaacggggcg ccgcctgc 500  
cccgtgtact caacgcctcc 400  
accttggctc tggccctggc caacctcaat gggtccaggc agcggtcggg 450  
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gcctctatgt tggcctgccc ccagagaaac ccgtcaacat cagctgctgg 550  
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tgccacatcc ccaaggaccc ggctctcttt acgcctatg agatctgggt 750  
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gtgagtgag ccacccaca gccgcctcca ctcccccgag tgagcgcccg 1150  
ggcccgccgcg gcggggcggtg cgaaccgcgg ggcggagagc cgagctcgaa 1200  
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atgcagaagt cgccacaagac ccgcacaaccag gacgaggggga tcctgcctc 1350  
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aaaaaaaaaa aaaaaaaaaa aaaaacaaaaa aaaaaaaaaa 1790

<210> 32  
<211> 422  
<212> PRT  
<213> Homo Sapien

<400> 32  
Met Pro Ala Gly Arg Arg Gly Pro Ala Ala Gln Ser Ala Arg Arg  
1 5 10 15  
Pro Pro Pro Leu Leu Pro Leu Leu Leu Leu Cys Val Leu Gly  
20 25 30  
Ala Pro Arg Ala Gly Ser Gly Ala His Thr Ala Val Ile Ser Pro  
35 40 45  
Gln Asp Pro Thr Leu Leu Ile Gly Ser Ser Leu Leu Ala Thr Cys  
50 55 60

Ser Val His Gly Asp Pro Pro Gly Ala Thr Ala Glu Gly Leu Tyr  
 65 70 75  
 Trp Thr Leu Asn Gly Arg Arg Leu Pro Pro Glu Leu Ser Arg Val  
 80 85 90  
 Leu Asn Ala Ser Thr Leu Ala Leu Ala Asn Leu Asn Gly  
 95 100 105  
 Ser Arg Gln Arg Ser Gly Asp Asn Leu Val Cys His Ala Arg Asp  
 110 115 120  
 Gly Ser Ile Leu Ala Gly Ser Cys Leu Tyr Val Gly Leu Pro Pro  
 125 130 135  
 Glu Lys Pro Val Asn Ile Ser Cys Trp Ser Lys Asn Met Lys Asp  
 140 145 150  
 Leu Thr Cys Arg Trp Thr Pro Gly Ala His Gly Glu Thr Phe Leu  
 155 160 165  
 His Thr Asn Tyr Ser Leu Lys Tyr Lys Leu Arg Trp Tyr Gly Gln  
 170 175 180  
 Asp Asn Thr Cys Glu Glu Tyr His Thr Val Gly Pro His Ser Cys  
 185 190 195  
 His Ile Pro Lys Asp Leu Ala Leu Phe Thr Pro Tyr Glu Ile Trp  
 200 205 210  
 Val Glu Ala Thr Asn Arg Leu Gly Ser Ala Arg Ser Asp Val Leu  
 215 220 225  
 Thr Leu Asp Ile Leu Asp Val Val Thr Thr Asp Pro Pro Pro Asp  
 230 235 240  
 Val His Val Ser Arg Val Gly Gly Leu Glu Asp Gln Leu Ser Val  
 245 250 255  
 Arg Trp Val Ser Pro Pro Ala Leu Lys Asp Phe Leu Phe Gln Ala  
 260 265 270  
 Lys Tyr Gln Ile Arg Tyr Arg Val Glu Asp Ser Val Asp Trp Lys  
 275 280 285  
 Val Val Asp Asp Val Ser Asn Gln Thr Ser Cys Arg Leu Ala Gly  
 290 295 300  
 Leu Lys Pro Gly Thr Val Tyr Phe Val Gln Val Arg Cys Asn Pro  
 305 310 315  
 Phe Gly Ile Tyr Gly Ser Lys Lys Ala Gly Ile Trp Ser Glu Trp  
 320 325 330  
 Ser His Pro Thr Ala Ala Ser Thr Pro Arg Ser Glu Arg Pro Gly  
 335 340 345  
 Pro Gly Gly Ala Cys Glu Pro Arg Gly Gly Glu Pro Ser Ser

350 355 360

Gly Pro Val Arg Arg Glu Leu Lys Gln Phe Leu Gly Trp Leu Lys  
365 370 375

Lys His Ala Tyr Cys Ser Asn Leu Ser Phe Arg Leu Tyr Asp Gln  
380 385 390

Trp Arg Ala Trp Met Gln Lys Ser His Lys Thr Arg Asn Gln Asp  
395 400 405

Glu Gly Ile Leu Pro Ser Gly Arg Arg Gly Thr Ala Arg Gly Pro  
410 415 420

Ala Arg

<210> 33

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 33

cccgccccgac gtgcacgtga gcc 23

<210> 34

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 34

tgagccagcc caggaactgc ttg 23

<210> 35

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 35

caagtgcgtc gcaaccctt tggcatctat ggctccaaga aagccggat 50

<210> 36

<211> 1771

<212> DNA

<213> Homo Sapien

<400> 36

cccacgcgtc cgctggtggtt agatcgagca accctctaaa agcagtttag 50

agtggtaaaa aaaaaaaaaa acacacccaaa cgctcgacgc cacaaaaagg 100  
atgaaatttc ttctggacat cctccctgctt ctcccgttac tgatcgtctg 150  
ctccctagag tccttcgtga agctttttat tcctaagagg agaaaatcag 200  
tcaccggcga aatcgtgctg attacaggag ctgggcattgg aattgggaga 250  
ctgactgcct atgaatttgc taaaacttaaa agcaagotgg ttctctggga 300  
tataaataag catggactgg aggaaacagc tgccaaatgc aagggactgg 350  
gtgccaagggt tcatacctt gtggtagact gcagcaaccg agaagatatt 400  
tacagctctg caaagaaggt gaaggcagaa attggagatg ttagtatttt 450  
agtaaataat gctggtagtgc tctatacatac agatttgc tgcatacacaag 500  
atcctcagat taaaagact tttgaagtta atgtacttgc acatttctgg 550  
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cacttaaattt ttgtataattt tttctgttctt acataaaatc 1400  
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tcacaatgaa tatcatgaac tctcaatggg taggtttcat cctaccattt 1500

gccactctgt ttcctgagag atacctcaca ttccaatgcc aaacatttct 1550  
gcacaggaa gctagaggtg gatacacgtg ttgcaagttt aaaaaggcatca 1600  
ctgggattta aggagaattt agagaatgtt cccacaaatg gcagcaataa 1650  
taaatggatc acacttaaaa aaaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa 1700  
aaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa 1750  
aaaaaaaaaaa aaaaaaaaaaaa a 1771

<210> 37  
<211> 300  
<212> PRT  
<213> Homo Sapien

<400> 37  
Met Lys Phe Leu Leu Asp Ile Leu Leu Leu Pro Leu Leu Ile  
1 5 10 15  
Val Cys Ser Leu Glu Ser Phe Val Lys Leu Phe Ile Pro Lys Arg  
20 25 30  
Arg Lys Ser Val Thr Gly Glu Ile Val Leu Ile Thr Gly Ala Gly  
35 40 45  
His Gly Ile Gly Arg Leu Thr Ala Tyr Glu Phe Ala Lys Leu Lys  
50 55 60  
Ser Lys Leu Val Leu Trp Asp Ile Asn Lys His Gly Leu Glu Glu  
65 70 75  
Thr Ala Ala Lys Cys Lys Gly Leu Gly Ala Lys Val His Thr Phe  
80 85 90  
Val Val Asp Cys Ser Asn Arg Glu Asp Ile Tyr Ser Ser Ala Lys  
95 100 105  
Lys Val Lys Ala Glu Ile Gly Asp Val Ser Ile Leu Val Asn Asn  
110 115 120  
Ala Gly Val Val Tyr Thr Ser Asp Leu Phe Ala Thr Gln Asp Pro  
125 130 135  
Gln Ile Glu Lys Thr Phe Glu Val Asn Val Leu Ala His Phe Trp  
140 145 150  
Thr Thr Lys Ala Phe Leu Pro Ala Met Thr Lys Asn Asn His Gly  
155 160 165  
His Ile Val Thr Val Ala Ser Ala Ala Gly His Val Ser Val Pro  
170 175 180  
Phe Leu Leu Ala Tyr Cys Ser Ser Lys Phe Ala Ala Val Gly Phe  
185 190 195  
His Lys Thr Leu Thr Asp Glu Leu Ala Ala Leu Gln Ile Thr Gly

200 205 210  
Val Lys Thr Thr Cys Leu Cys Pro Asn Phe Val Asn Thr Gly Phe  
215 220 225  
Ile Lys Asn Pro Ser Thr Ser Leu Gly Pro Thr Leu Glu Pro Glu  
230 235 240  
Glu Val Val Asn Arg Leu Met His Gly Ile Leu Thr Glu Gln Lys  
245 250 255  
Met Ile Phe Ile Pro Ser Ser Ile Ala Phe Leu Thr Thr Leu Glu  
260 265 270  
Arg Ile Leu Pro Glu Arg Phe Leu Ala Val Leu Lys Arg Lys Ile  
275 280 285  
Ser Val Lys Phe Asp Ala Val Ile Gly Tyr Lys Met Lys Ala Gln  
290 295 300

<210> 38

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 38

ggtaaggca gaaattggag atg 23

<210> 39

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 39

atccatgca tcagcctgtt tacc 24

<210> 40

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 40

gctgggttag tctatacatac agattttttt gctacacaag atccctcag 48

<210> 41

<211> 1377

<212> DNA

<213> Homo Sapien

<400> 41  
gactagtctt cttggagtct gggaggagga aagcggagcc ggcagggagc 50  
gaaccaggac tggggtgacg gcagggcagg gggcgctgg ccggggagaa 100  
gcgcgggggc tggagcacca ccaactggag ggtccggagt agcgagcgcc 150  
ccgaaggagg ccatacgggga gccgggaggg gggactgcga gaggaccccg 200  
gcgtccgggc tcccggtgcc agcgctatga ggccactcct cgtcctgctg 250  
ctccctggcc tggcgcccg ctcgccccca ctggacgaca acaagatccc 300  
cagcctctgc ccggggcacc ccggccttcc aggacacgcgg ggccaccatg 350  
gcagccaggg cttgccgggc cgcgatggcc gcgacggccg cgacggcgcg 400  
cccgggctc cgggagagaa aggcgagggc gggaggccgg gactgccggg 450  
acctcgaggg gaccccgggc cgcgaggaga ggccggaccc gcggggccca 500  
ccggcctgc cggggagatgc tcggtgccctc cgcgatccgc cttcagcgcc 550  
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cgaccgcgtg ctggtaacg agcaggaca ttacgacgccc gtcacccggca 650  
atttcacctg ccaggtgcct ggggtctact acttcgcgtt ccatgccacc 700  
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cggggggggc catggtgagg ctggagcctg aggaccaagt gtgggtgcag 850  
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caccttctcc ggatttctgg tgtactccga ctggcacacgc tccccagtct 950  
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gggtgtgagg ctgacaacca ggtcatccag gagggctggc cccccctggaa 1050  
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gcagtggctg gatttctgcc caagaccaga ggagtgtgtt gtgctggcaa 1200  
gtgttaagtcc cccagttgtt ctgggtccagg agcccacgggt ggggtgtctt 1250  
cttcctggtc ctctgcttct ctggatcctc cccacccctt cctgctctg 1300  
ggccggccc ttttctcaga gatcactcaa taaacctaag aaccctcata 1350  
aaaaaaaaaaa aaaaaaaaaa aaaaaaaaa 1377

<210> 42

<211> 243  
<212> PRT  
<213> Homo Sapien

<400> 42

Met	Arg	Pro	Leu	Leu	Val	Leu	Leu	Leu	Gly	Leu	Ala	Ala	Gly	
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Ser	Pro	Pro	Leu	Asp	Asp	Asn	Lys	Ile	Pro	Ser	Leu	Cys	Pro	Gly
			20				25				30			
His	Pro	Gly	Leu	Pro	Gly	Thr	Pro	Gly	His	His	Gly	Ser	Gln	Gly
			35				40				45			
Leu	Pro	Gly	Arg	Asp	Gly	Arg	Asp	Gly	Arg	Asp	Gly	Ala	Pro	Gly
			50				55				60			
Ala	Pro	Gly	Glu	Lys	Gly	Glu	Gly	Gly	Arg	Pro	Gly	Leu	Pro	Gly
			65				70				75			
Pro	Arg	Gly	Asp	Pro	Gly	Pro	Arg	Gly	Glu	Ala	Gly	Pro	Ala	Gly
			80				85				90			
Pro	Thr	Gly	Pro	Ala	Gly	Glu	Cys	Ser	Val	Pro	Pro	Arg	Ser	Ala
			95				100				105			
Phe	Ser	Ala	Lys	Arg	Ser	Glu	Ser	Arg	Val	Pro	Pro	Pro	Ser	Asp
			110				115				120			
Ala	Pro	Leu	Pro	Phe	Asp	Arg	Val	Leu	Val	Asn	Glu	Gln	Gly	His
			125				130				135			
Tyr	Asp	Ala	Val	Thr	Gly	Lys	Phe	Thr	Cys	Gln	Val	Pro	Gly	Val
			140				145				150			
Tyr	Tyr	Phe	Ala	Val	His	Ala	Thr	Val	Tyr	Arg	Ala	Ser	Leu	Gln
			155				160				165			
Phe	Asp	Leu	Val	Lys	Asn	Gly	Glu	Ser	Ile	Ala	Ser	Phe	Phe	Gln
			170				175				180			
Phe	Phe	Gly	Gly	Trp	Pro	Lys	Pro	Ala	Ser	Leu	Ser	Gly	Gly	Ala
			185				190				195			
Met	Val	Arg	Leu	Glu	Pro	Glu	Asp	Gln	Val	Trp	Val	Gln	Val	Gly
			200				205				210			
Val	Gly	Asp	Tyr	Ile	Gly	Ile	Tyr	Ala	Ser	Ile	Lys	Thr	Asp	Ser
			215				220				225			
Thr	Phe	Ser	Gly	Phe	Leu	Val	Tyr	Ser	Asp	Trp	His	Ser	Ser	Pro
			230				235				240			
Val	Phe	Ala												

<210> 43  
<211> 24

<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 43  
 tacaggccca gtcaggacca gggg 24

<210> 44  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 44  
 agccagcctc gctctcg 18

<210> 45  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 45  
 gtctgcgatc aggtctgg 18

<210> 46  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 46  
 gaaagaggca atggattcgc 20

<210> 47  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 47  
 gacttacact tgccagcaca gcac 24

<210> 48  
<211> 45  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe  
  
<400> 48  
ggagcaccac caactggagg gtccggagta gcgagcgc 45  
  
<210> 49  
<211> 1876  
<212> DNA  
<213> Homo Sapien  
  
<400> 49  
ctctttgtc caccagccca gcctgactcc tggagattgt gaatagctcc 50  
atccagcctg agaaacaagc cgggtggctg agccaggctg tgcacggagc 100  
acctgacggg cccaacacagac ccattgtgc tccagagacc tccctggcc 150  
gggggcatct cctggctgtg ctcctggccc tccttggcac cacctggca 200  
gaggtgtggc caccggcagct gcaggagcag gctccgatgg ccggagccct 250  
gaacaggaag gagagttct tgcctcttc cctgcacaac cgctgcgca 300  
gctgggtcca gccccctgcg gctgacatgc ggaggctgga ctggagtgac 350  
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tgcagctgct gccccggc ttggcgctt ttgttgaagt ggtcagecta 500  
tggtttgcag aggggcagcg gtacagccac gcggcaggag agtgtgctcg 550  
caacgccacc tgcacccact acacgcagct cgtgtggcc acctcaagcc 600  
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gtccccagga atccttgcg catgagctgc cagaaccatg gacgtctcaa 850  
catcagcacc tgccactgcc actgtcccc tggctacacg ggcagatact 900  
gccaagtgag gtgcagcctg cagtgtgtgc acggccgggtt ccgggaggag 950  
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caaggtgcat ttcccttcc acacctgtga cctgaggatc gacggagact 1050  
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tgtcagagga aaggcggggt gctggccca gatcaagagcc agaaagtgc 1150

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accgccaagg actccttccg ctggccaca ggggagcacc aggccttcac 1300  
cagtttgcc tttggcagc ctgacaacca cgggctggtg tggctgagtg 1350  
ctgccatggg gttggcaac tgcgtggagc tgcaggcttc agtcgccttc 1400  
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gcctgctttt gattgggaag atgggcttca attagatggc gaaggagagg 1750  
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tgtgggcag cggagcttcc ctgtggcatg aaccccacgg ggtattaaat 1850  
tatgaatcag ctgaaaaaaaaaaaaa 1876

<210> 50  
<211> 455  
<212> PRT  
<213> Homo Sapien

<400> 50  
Met Leu His Pro Glu Thr Ser Pro Gly Arg Gly His Leu Leu Ala  
1 5 10 15  
Val Leu Leu Ala Leu Leu Gly Thr Thr Trp Ala Glu Val Trp Pro  
20 25 30  
Pro Gln Leu Gln Glu Gln Ala Pro Met Ala Gly Ala Leu Asn Arg  
35 40 45  
Lys Glu Ser Phe Leu Leu Leu Ser Leu His Asn Arg Leu Arg Ser  
50 55 60  
Trp Val Gln Pro Pro Ala Ala Asp Met Arg Arg Leu Asp Trp Ser  
65 70 75  
Asp Ser Leu Ala Gln Leu Ala Gln Ala Arg Ala Ala Leu Cys Gly  
80 85 90  
Ile Pro Thr Pro Ser Leu Ala Ser Gly Leu Trp Arg Thr Leu Gln  
95 100 105  
Val Gly Trp Asn Met Gln Leu Leu Pro Ala Gly Leu Ala Ser Phe

110	115	120
Val Glu Val Val Ser Leu Trp Phe Ala Glu Gly Gln Arg Tyr Ser		
125	130	135
His Ala Ala Gly Glu Cys Ala Arg Asn Ala Thr Cys Thr His Tyr		
140	145	150
Thr Gln Leu Val Trp Ala Thr Ser Ser Gln Leu Gly Cys Gly Arg		
155	160	165
His Leu Cys Ser Ala Gly Gln Thr Ala Ile Glu Ala Phe Val Cys		
170	175	180
Ala Tyr Ser Pro Gly Gly Asn Trp Glu Val Asn Gly Lys Thr Ile		
185	190	195
Ile Pro Tyr Lys Lys Gly Ala Trp Cys Ser Leu Cys Thr Ala Ser		
200	205	210
Val Ser Gly Cys Phe Lys Ala Trp Asp His Ala Gly Gly Leu Cys		
215	220	225
Glu Val Pro Arg Asn Pro Cys Arg Met Ser Cys Gln Asn His Gly		
230	235	240
Arg Leu Asn Ile Ser Thr Cys His Cys His Cys Pro Pro Gly Tyr		
245	250	255
Thr Gly Arg Tyr Cys Gln Val Arg Cys Ser Leu Gln Cys Val His		
260	265	270
Gly Arg Phe Arg Glu Glu Glu Cys Ser Cys Val Cys Asp Ile Gly		
275	280	285
Tyr Gly Gly Ala Gln Cys Ala Thr Lys Val His Phe Pro Phe His		
290	295	300
Thr Cys Asp Leu Arg Ile Asp Gly Asp Cys Phe Met Val Ser Ser		
305	310	315
Glu Ala Asp Thr Tyr Tyr Arg Ala Arg Met Lys Cys Gln Arg Lys		
320	325	330
Gly Gly Val Leu Ala Gln Ile Lys Ser Gln Lys Val Gln Asp Ile		
335	340	345
Leu Ala Phe Tyr Leu Gly Arg Leu Glu Thr Thr Asn Glu Val Thr		
350	355	360
Asp Ser Asp Phe Glu Thr Arg Asn Phe Trp Ile Gly Leu Thr Tyr		
365	370	375
Lys Thr Ala Lys Asp Ser Phe Arg Trp Ala Thr Gly Glu His Gln		
380	385	390
Ala Phe Thr Ser Phe Ala Phe Gly Gln Pro Asp Asn His Gly Leu		
395	400	405

Val Trp Leu Ser Ala Ala Met Gly Phe Gly Asn Cys Val Glu Leu  
410 415 420  
Gln Ala Ser Ala Ala Phe Asn Trp Asn Asp Gln Arg Cys Lys Thr  
425 430 435  
Arg Asn Arg Tyr Ile Cys Gln Phe Ala Gln Glu His Ile Ser Arg  
440 445 450  
Trp Gly Pro Gly Ser  
455

<210> 51

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 51

aggaacttct ggatcgggct cacc 24

<210> 52

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 52

gggtctgggc caggtggaaag agag 24

<210> 53

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 53

gccaaggact cttcccgctg ggccacaggg gagcaccagg cttc 45

<210> 54

<211> 2331

<212> DNA

<213> Homo Sapien

<400> 54

cgacgcgtg ggctgggcgc tgcaaagct gtcccgccgg gtccccgagc 50

gtcccgccgc ctgcggccgc catgctcctg ctgctggggc tgtgcctggg 100

gctgtccctg tgtgtggggc cgccaggaaga ggccacagac tggggccact 150

cttcggagca ggatggactc agggtccgaa ggcaagtcag actgttgcag 200

aggctgaaaa ccaaaccctt gatgacagaa ttctcagtga agtctaccat 250  
cattcccgat tatgccttca ctacggtttc ctgcagaatg ctgaacagag 300  
cttctgaaga ccaggacatt gagttccaga tgcagattcc agtgcagct 350  
ttcatcacca acttcactat gcttatttggaa gacaagggtgt atcagggcga 400  
aattacagag agagaaaaga agagtggtga tagggtaaaa gagaaaagga 450  
ataaaaaccac agaagaaaat ggagagaagg ggactgaaat attcagagct 500  
tctgcagtga ttcccagcaa ggacaaagcc gccttttcc tgagttatga 550  
ggagcttctg cagagggcgcc tggcaagta cgagcacagc atcagcgtgc 600  
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gaggggcagt gggcgccggg aagatgattc tggcctccc ccatctactg 750  
tcattaacca aaatgaaaca tttgccaaca taattttaa acctactgta 800  
gtacaacaag ccaggattgc ccagaatgga attttggag actttatcat 850  
tagatatgac gtcaatagag aacagagcat tggggacatc caggttctaa 900  
atggctattt tgtgcactac tttgctccta aagaccttcc tcctttaccc 950  
aagaatgtgg tattcgtgct tgacagcagt gcttctatgg tgggaaccaa 1000  
actccggcag accaaggatg ccctttcac aatttccat gacctccgac 1050  
cccaggaccg tttcagtatc attggatttt ccaaccggat caaagtatgg 1100  
aaggaccact tgatatcagt cactccagac agcatcaggg atggaaagt 1150  
gtacattcac catatgtcac ccactggagg cacagacatc aacggggccc 1200  
tgcagagggc catcaggctc ctcaacaagt acgtggccca cagtggcatt 1250  
ggagaccgga gcgtgtccct catcgcttcc ctgacggatg ggaagccac 1300  
ggtcggggag acgcacacccc tcaagatcct caacaacacc cgagaggccg 1350  
cccgaggcca agtctgcac ttcaccattt gcatcgccaa cgacgtggac 1400  
ttcaggctgc tggagaaact gtcgctggag aactgtggcc tcacacggcg 1450  
cgtgcacgag gaggaggacg caggctcgca gtcatcggg ttctacgatg 1500  
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gatgaaccgg agaaggageg gctgcggcag cgggcccagg ccctggctgt 1900  
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tcccacgcat ggtatggcctg gaggaggccc acggcatgtc ggctgccatg 2000  
ggacccgaac cgggtggtgca gagcgtgcga ggagctggca cgcagccagg 2050  
acctttgctc aagaagccaa actccgtcaa aaaaaaaacaa aacaaaacaa 2100  
aaaaaaagaca tgggagagat ggtgttttc ctctccacca cctggggata 2150  
cgatgagaag atggccacct gcaagccagg aagacggccc tcaccagaca 2200  
ccatgtctgc tggcaccttgc atcttgacc tcccaagcctc cagaactgtg 2250  
agaaataaat gtgtttgtt taagctaaaa aaaaaaaaaa aaaaaaaaaa 2300  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a 2331

<210> 55  
<211> 694  
<212> PRT  
<213> Homo Sapien

<400> 55  
Met Leu Leu Leu Leu Gly Leu Cys Leu Gly Leu Ser Leu Cys Val  
1 5 10 15  
Gly Ser Gln Glu Glu Ala Gln Ser Trp Gly His Ser Ser Glu Gln  
20 25 30  
Asp Gly Leu Arg Val Pro Arg Gln Val Arg Leu Leu Gln Arg Leu  
35 40 45  
Lys Thr Lys Pro Leu Met Thr Glu Phe Ser Val Lys Ser Thr Ile  
50 55 60  
Ile Ser Arg Tyr Ala Phe Thr Thr Val Ser Cys Arg Met Leu Asn  
65 70 75  
Arg Ala Ser Glu Asp Gln Asp Ile Glu Phe Gln Met Gln Ile Pro  
80 85 90  
Ala Ala Ala Phe Ile Thr Asn Phe Thr Met Leu Ile Gly Asp Lys  
95 100 105  
Val Tyr Gln Gly Glu Ile Thr Glu Arg Glu Lys Lys Ser Gly Asp  
110 115 120

Arg Val Lys Glu Lys Arg Asn Lys Thr Thr Glu Glu Asn Gly Glu  
 125 130 135  
 Lys Gly Thr Glu Ile Phe Arg Ala Ser Ala Val Ile Pro Ser Lys  
 140 145 150  
 Asp Lys Ala Ala Phe Phe Leu Ser Tyr Glu Glu Leu Leu Gln Arg  
 155 160 165  
 Arg Leu Gly Lys Tyr Glu His Ser Ile Ser Val Arg Pro Gln Gln  
 170 175 180  
 Leu Ser Gly Arg Leu Ser Val Asp Val Asn Ile Leu Glu Ser Ala  
 185 190 195  
 Gly Ile Ala Ser Leu Glu Val Leu Pro Leu His Asn Ser Arg Gln  
 200 205 210  
 Arg Gly Ser Gly Arg Gly Glu Asp Asp Ser Gly Pro Pro Pro Ser  
 215 220 225  
 Thr Val Ile Asn Gln Asn Glu Thr Phe Ala Asn Ile Ile Phe Lys  
 230 235 240  
 Pro Thr Val Val Gln Gln Ala Arg Ile Ala Gln Asn Gly Ile Leu  
 245 250 255  
 Gly Asp Phe Ile Ile Arg Tyr Asp Val Asn Arg Glu Gln Ser Ile  
 260 265 270  
 Gly Asp Ile Gln Val Leu Asn Gly Tyr Phe Val His Tyr Phe Ala  
 275 280 285  
 Pro Lys Asp Leu Pro Pro Leu Pro Lys Asn Val Val Phe Val Leu  
 290 295 300  
 Asp Ser Ser Ala Ser Met Val Gly Thr Lys Leu Arg Gln Thr Lys  
 305 310 315  
 Asp Ala Leu Phe Thr Ile Leu His Asp Leu Arg Pro Gln Asp Arg  
 320 325 330  
 Phe Ser Ile Ile Gly Phe Ser Asn Arg Ile Lys Val Trp Lys Asp  
 335 340 345  
 His Leu Ile Ser Val Thr Pro Asp Ser Ile Arg Asp Gly Lys Val  
 350 355 360  
 Tyr Ile His His Met Ser Pro Thr Gly Gly Thr Asp Ile Asn Gly  
 365 370 375  
 Ala Leu Gln Arg Ala Ile Arg Leu Leu Asn Lys Tyr Val Ala His  
 380 385 390  
 Ser Gly Ile Gly Asp Arg Ser Val Ser Leu Ile Val Phe Leu Thr  
 395 400 405  
 Asp Gly Lys Pro Thr Val Gly Glu Thr His Thr Leu Lys Ile Leu

410	415	420
Asn Asn Thr Arg Glu Ala Ala Arg Gly Gln Val Cys Ile Phe Thr		
425	430	435
Ile Gly Ile Gly Asn Asp Val Asp Phe Arg Leu Leu Glu Lys Leu		
440	445	450
Ser Leu Glu Asn Cys Gly Leu Thr Arg Arg Val His Glu Glu Glu		
455	460	465
Asp Ala Gly Ser Gln Leu Ile Gly Phe Tyr Asp Glu Ile Arg Thr		
470	475	480
Pro Leu Leu Ser Asp Ile Arg Ile Asp Tyr Pro Pro Ser Ser Val		
485	490	495
Val Gln Ala Thr Lys Thr Leu Phe Pro Asn Tyr Phe Asn Gly Ser		
500	505	510
Glu Ile Ile Ile Ala Gly Lys Leu Val Asp Arg Lys Leu Asp His		
515	520	525
Leu His Val Glu Val Thr Ala Ser Asn Ser Lys Lys Phe Ile Ile		
530	535	540
Leu Lys Thr Asp Val Pro Val Arg Pro Gln Lys Ala Gly Lys Asp		
545	550	555
Val Thr Gly Ser Pro Arg Pro Gly Gly Asp Gly Glu Gly Asp Thr		
560	565	570
Asn His Ile Glu Arg Leu Trp Ser Tyr Leu Thr Thr Lys Glu Leu		
575	580	585
Leu Ser Ser Trp Leu Gln Ser Asp Asp Glu Pro Glu Lys Glu Arg		
590	595	600
Leu Arg Gln Arg Ala Gln Ala Leu Ala Val Ser Tyr Arg Phe Leu		
605	610	615
Thr Pro Phe Thr Ser Met Lys Leu Arg Gly Pro Val Pro Arg Met		
620	625	630
Asp Gly Leu Glu Glu Ala His Gly Met Ser Ala Ala Met Gly Pro		
635	640	645
Glu Pro Val Val Gln Ser Val Arg Gly Ala Gly Thr Gln Pro Gly		
650	655	660
Pro Leu Leu Lys Lys Pro Asn Ser Val Lys Lys Lys Gln Asn Lys		
665	670	675
Thr Lys Lys Arg His Gly Arg Asp Gly Val Phe Pro Leu His His		
680	685	690
Leu Gly Ile Arg		

<210> 56  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 56  
gtgggaacca aactccggca gacc 24

<210> 57  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 57  
cacatcgagc gtctctgg 18

<210> 58  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 58  
agccgctcct tctccggttc atcg 24

<210> 59  
<211> 48  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 59  
tggaaggacc acttgatatac agtcactcca gacagcatca gggatggg 48

<210> 60  
<211> 1413  
<212> DNA  
<213> Homo Sapien

<400> 60  
cgacgcgtg ggggccgga catggcgagt gtatgtctgc cgagcggatc 50  
ccagtgtgcg gggcagcgg cggcgccggc gcctcccggttcc 100  
tgctgttgct cttctccgcc gggcactga tccccacagg tggatggcag 150  
aatctgttta cgaaagacgt gacagtgtac gagggagagg ttgcgaccat 200

cagttgccaa gtcaataaga gtgacgactc tgtgattcag ctactgaatc 250  
ccaacaggca gaccattat ttcagggact tcaggcctt gaaggacagc 300  
aggtttcagt tgctgaattt ttcttagcagt gaactcaaag tattcattgac 350  
aaacgtctca atttctgatg aaggaagata ctttgccag ctctataccg 400  
atcccccaca ggaaagttac accaccatca cagtcctggc cccaccacgt 450  
aatctgatga tcgatatacca gaaagacact gcgggtggaaag gtgaggagat 500  
tgaagtcaac tgcactgcta tggccagcaa gccagccacg actatcaggt 550  
ggttcaaagg gaacacagag ctaaaaggca aatcgaggt ggaagagtgg 600  
tcagacatgt acactgtgac cagtcagctg atgctgaagg tgcacaagga 650  
ggacgatggg gtcccagtga tctgccaggt ggagcacccct gcggtcactg 700  
gaaacctgca gacccagcgg tatctagaag tacagtataa gcctcaagtg 750  
cacattcaga tgacttatcc tctacaaggc ttaaccggg aaggggacgc 800  
gcttgagttt acatgtgaag ccateggaa gccccagccct gtgatggtaa 850  
cttgggtgag agtcgatgtat gaaatgcctc aacacgcgt actgtctggg 900  
cccaacctgt tcatcaataa cctaaacaaa acagataatg gtacataccg 950  
ctgtgaagct tcaaacatag tggggaaagc tcactcggat tatatgctgt 1000  
atgtatacga tccccccaca actatccctc ctcccacaac aaccaccacc 1050  
accaccacca ccaccaccac caccatcctt accatcatca cagattcccg 1100  
agcaggtgaa gaaggctcga tcagggcagt ggatcatgcc gtgateggtg 1150  
gcgtcgtggc ggtgggtggtg ttgcctatgc tgtgcttgct catcattctg 1200  
ggcgctatt ttgccagaca taaaggtaca tacttcactc atgaagccaa 1250  
aggagccgat gacgcagcag acgcagacac agctataatc aatgcagaag 1300  
gaggacagaa caactccgaa gaaaagaaaag agtacttcat ctagatcago 1350  
ctttttgttt caatgaggtg tccaaactggc cctattttaga tgataaagag 1400  
acagtgatata tgg 1413

<210> 61  
<211> 440  
<212> PRT  
<213> Homo Sapien

<400> 61  
Met Ala Ser Val Val Leu Pro Ser Gly Ser Gln Cys Ala Ala Ala  
1 5 10 15

Ala	Ala	Ala	Ala	Ala	Pro	Pro	Gly	Leu	Arg	Leu	Leu	Leu	Leu	
					20			25					30	
Phe	Ser	Ala	Ala	Ala	Leu	Ile	Pro	Thr	Gly	Asp	Gly	Gln	Asn	Leu
					35			40					45	
Phe	Thr	Lys	Asp	Val	Thr	Val	Ile	Glu	Gly	Glu	Val	Ala	Thr	Ile
					50			55					60	
Ser	Cys	Gln	Val	Asn	Lys	Ser	Asp	Asp	Ser	Val	Ile	Gln	Leu	Leu
					65				70				75	
Asn	Pro	Asn	Arg	Gln	Thr	Ile	Tyr	Phe	Arg	Asp	Phe	Arg	Pro	Leu
					80			85					90	
Lys	Asp	Ser	Arg	Phe	Gln	Leu	Leu	Asn	Phe	Ser	Ser	Ser	Glu	Leu
					95			100					105	
Lys	Val	Ser	Leu	Thr	Asn	Val	Ser	Ile	Ser	Asp	Glu	Gly	Arg	Tyr
					110			115					120	
Phe	Cys	Gln	Leu	Tyr	Thr	Asp	Pro	Pro	Gln	Glu	Ser	Tyr	Thr	Thr
					125				130				135	
Ile	Thr	Val	Leu	Val	Pro	Pro	Arg	Asn	Leu	Met	Ile	Asp	Ile	Gln
					140				145				150	
Lys	Asp	Thr	Ala	Val	Glu	Gly	Glu	Glu	Ile	Glu	Val	Asn	Cys	Thr
					155				160				165	
Ala	Met	Ala	Ser	Lys	Pro	Ala	Thr	Thr	Ile	Arg	Trp	Phe	Lys	Gly
					170				175				180	
Asn	Thr	Glu	Leu	Lys	Gly	Lys	Ser	Glu	Val	Glu	Glu	Trp	Ser	Asp
					185			190					195	
Met	Tyr	Thr	Val	Thr	Ser	Gln	Leu	Met	Leu	Lys	Val	His	Lys	Glu
					200			205					210	
Asp	Asp	Gly	Val	Pro	Val	Ile	Cys	Gln	Val	Glu	His	Pro	Ala	Val
					215				220				225	
Thr	Gly	Asn	Leu	Gln	Thr	Gln	Arg	Tyr	Leu	Glu	Val	Gln	Tyr	Lys
					230				235				240	
Pro	Gln	Val	His	Ile	Gln	Met	Thr	Tyr	Pro	Leu	Gln	Gly	Leu	Thr
					245				250				255	
Arg	Glu	Gly	Asp	Ala	Leu	Glu	Leu	Thr	Cys	Glu	Ala	Ile	Gly	Lys
					260				265				270	
Pro	Gln	Pro	Val	Met	Val	Thr	Trp	Val	Arg	Val	Asp	Asp	Glu	Met
					275				280				285	
Pro	Gln	His	Ala	Val	Leu	Ser	Gly	Pro	Asn	Leu	Phe	Ile	Asn	Asn
					290				295				300	
Leu	Asn	Lys	Thr	Asp	Asn	Gly	Thr	Tyr	Arg	Cys	Glu	Ala	Ser	Asn

305 310 315

Ile Val Gly Lys Ala His Ser Asp Tyr Met Leu Tyr Val Tyr Asp  
320 325 330

Pro Pro Thr Thr Ile Pro Pro Pro Thr Thr Thr Thr Thr Thr Thr  
335 340 345

Thr Thr Thr Thr Thr Ile Leu Thr Ile Ile Thr Asp Ser Arg  
350 355 360

Ala Gly Glu Glu Gly Ser Ile Arg Ala Val Asp His Ala Val Ile  
365 370 375

Gly Gly Val Val Ala Val Val Val Phe Ala Met Leu Cys Leu Leu  
380 385 390

Ile Ile Leu Gly Arg Tyr Phe Ala Arg His Lys Gly Thr Tyr Phe  
395 400 405

Thr His Glu Ala Lys Gly Ala Asp Asp Ala Ala Asp Ala Asp Thr  
410 415 420

Ala Ile Ile Asn Ala Glu Gly Gly Gln Asn Asn Ser Glu Glu Lys  
425 430 435

Lys Glu Tyr Phe Ile  
440

<210> 62

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 62

ggcttctgct gttgctcttc tccg 24

<210> 63

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 63

gtacactgtg accagtcagc 20

<210> 64

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 64  
atcatcacag attcccgagc 20

<210> 65  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 65  
ttcaatctcc tcacaccttcca ccgc 24

<210> 66  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 66  
atacgctgtgt ctgcgtctgc tgcg 24

<210> 67  
<211> 50  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 67  
cgcgccactg atccccacag gtgatggca gaatctgttt acgaaagacg 50

<210> 68  
<211> 2555  
<212> DNA  
<213> Homo Sapien

<400> 68  
ggggcggtg gacgcccact cgaacgcagt tgcttcggga cccaggaccc 50  
cctcgccccc gaccgcggcag gaaagactga ggccgcggcc tgccccggcc 100  
ggctccctgc gccgcggccg cctccggga cagaagatgt gctccagggt 150  
ccctctgtcg ctgcgcgtgc tcctgtact ggccctgggg cctgggtgc 200  
agggtgtccc atccggctgc cagtgcagcc agccacagac agtcttctgc 250  
actgcccggcc aggggaccac ggtgccccga gacgtgccac ccgacacgg 300  
ggggctgtac gtcttgaga acggcatcac catgtcgac gcaaggagct 350  
ttggccggcct gccggccctg cagctcctgg acctgtcaca gaaccagatc 400

gccagcctgc gcctgccccg cctgtgtgtg ctggacctca gccacaacag 450  
cctcctggcc ctggagccccg gcacccctgga cactgccaac gtggaggcgc 500  
tgcggctggc tggctctgggg ctgcagcagc tggacgaggg gctttcagc 550  
cgcttgcgca acctccacga cctggatgtg tccgacaacc agctggagcg 600  
agtgccaccc gtatcccgag gcctccgggg cctgacgcgc ctgcggctgg 650  
ccggcaacac ccgcattgcc cagctgcggc ccgaggaccc ggccggcctg 700  
gctgccctgc aggagctgga tgtgagcaac ctaaggctgc aggccctgcc 750  
tggcgaccc tcgggcctct tccccccct gcggctgtg gcagctgccc 800  
gcaaccctt caactgcgtg tgccccctga gctggtttg cccctgggtg 850  
cgcgagagcc acgtcacact ggccagccct gaggagacgc gctgccactt 900  
cccgcccaag aacgctggcc ggctgctccct ggagcttgac tacgcccact 950  
ttggctgccc agccaccacc accacagcca cagtgccac cacgaggccc 1000  
gtggcgccgg agcccacagc cttgtcttct agcttggctc ctacctggct 1050  
tagccccaca gcgcggcca ctgaggcccc cagcccgccc tccactgccc 1100  
caccgactgt agggcctgtc cccagcccc aggactgccc accgtccacc 1150  
tgcctcaatg gggcacatg ccacctgggg acacggcacc acctggcgtg 1200  
cttgcctccc gaaggcttca cgggcctgta ctgtgagagc cagatggggc 1250  
aggggacacg gcccagccct acaccagtca cggcgaggcc accacggtcc 1300  
ctgaccctgg gcatcgagcc ggtgagcccc acctccctgc gcgtggggct 1350  
gcagcgctac ctccaggggga gtcggctgca gtcaggagc ctccgtctca 1400  
cctatcgcaa cctatcgggc cctgataagc ggctggtgac gctgcgactg 1450  
cctgcctcgc tcgctgagta cacggtcacc cagctgcggc ccaacgccac 1500  
ttactccgtc tgtgtcatgc ctttggggcc cgggcgggtg ccggagggcg 1550  
aggaggcctg cggggaggcc catacaccac cagccgtcca ctccaaccac 1600  
gccccagtcg cccaggcccc cgagggcaac ctgcccgtcc tcattgcgcc 1650  
cgccctggcc ggggtgctcc tggccgcgtc ggctgcgggtg gggcagccct 1700  
actgtgtgcg gggggggcgg gccatggcag cagccgtca ggacaaagg 1750  
caggtggggc caggggctgg gcccctggaa ctggaggagag tgaaggtccc 1800  
cttggagcca ggcccgaaagg caacagaggg cggtggagag gcccctgccc 1850

gcgggtctga gtgtgagggtg ccactcatgg gcttccagg gcctggcctc 1900  
cagtcacccc tccacgcaaa gcccataatc taagccagag agagacaggg 1950  
cagctggggc cgggctctca gccagtgaga tggccagccc cctcctgctg 2000  
ccacaccacg taagttctca gtcccaacct cggggatgtg tgcagacagg 2050  
gctgtgtgac cacagctggg ccctgttccc tctggacetc ggtctectca 2100  
tctgtgagat gctgtggccc agctgacgag ccctaacgtc cccagaaccg 2150  
agtgcctatg aggacagtgt ccgecctgac ctccgcaacg tgcagtcct 2200  
gggcacggcg gcccctgcca tgtgctggta acgcatgct gggccctgct 2250  
gggctctccc actccaggcg gaccctgggg gccagtgaag gaagctcccg 2300  
gaaagagcag agggagagcg ggtaggcggc tgtgtgactc tagtcttggc 2350  
cccaggaagc gaaggaacaa aagaaactgg aaaggaagat gctttaggaa 2400  
catgtttgc tttttaaaa tatatatata tttataagag atccttccc 2450  
atttattctg ggaagatgtt tttcaaactc agagacaagg actttggtt 2500  
ttgtaagaca aacgatgata tgaaggcctt ttgtaagaaa aaataaaaaaa 2550  
aaaaaa 2555

<210> 69  
<211> 598  
<212> PRT  
<213> Homo Sapien

<400> 69  
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1 5 10 15  
Ala Leu Gly Pro Gly Val Gln Gly Cys Pro Ser Gly Cys Gln Cys  
20 25 30  
Ser Gln Pro Gln Thr Val Phe Cys Thr Ala Arg Gln Gly Thr Thr  
35 40 45  
Val Pro Arg Asp Val Pro Pro Asp Thr Val Gly Leu Tyr Val Phe  
50 55 60  
Glu Asn Gly Ile Thr Met Leu Asp Ala Ser Ser Phe Ala Gly Leu  
65 70 75  
Pro Gly Leu Gln Leu Leu Asp Leu Ser Gln Asn Gln Ile Ala Ser  
80 85 90  
Leu Arg Leu Pro Arg Leu Leu Leu Asp Leu Ser His Asn Ser  
95 100 105  
Leu Leu Ala Leu Glu Pro Gly Ile Leu Asp Thr Ala Asn Val Glu

110	115	120
Ala Leu Arg Leu Ala Gly Leu Gly Leu Gln Gln Leu Asp Glu Gly		
125	130	135
Leu Phe Ser Arg Leu Arg Asn Leu His Asp Leu Asp Val Ser Asp		
140	145	150
Asn Gln Leu Glu Arg Val Pro Pro Val Ile Arg Gly Leu Arg Gly		
155	160	165
Leu Thr Arg Leu Arg Leu Ala Gly Asn Thr Arg Ile Ala Gln Leu		
170	175	180
Arg Pro Glu Asp Leu Ala Gly Leu Ala Ala Leu Gln Glu Leu Asp		
185	190	195
Val Ser Asn Leu Ser Leu Gln Ala Leu Pro Gly Asp Leu Ser Gly		
200	205	210
Leu Phe Pro Arg Leu Arg Leu Leu Ala Ala Ala Arg Asn Pro Phe		
215	220	225
Asn Cys Val Cys Pro Leu Ser Trp Phe Gly Pro Trp Val Arg Glu		
230	235	240
Ser His Val Thr Leu Ala Ser Pro Glu Glu Thr Arg Cys His Phe		
245	250	255
Pro Pro Lys Asn Ala Gly Arg Leu Leu Leu Glu Leu Asp Tyr Ala		
260	265	270
Asp Phe Gly Cys Pro Ala Thr Thr Thr Ala Thr Val Pro Thr		
275	280	285
Thr Arg Pro Val Val Arg Glu Pro Thr Ala Leu Ser Ser Ser Leu		
290	295	300
Ala Pro Thr Trp Leu Ser Pro Thr Ala Pro Ala Thr Glu Ala Pro		
305	310	315
Ser Pro Pro Ser Thr Ala Pro Pro Thr Val Gly Pro Val Pro Gln		
320	325	330
Pro Gln Asp Cys Pro Pro Ser Thr Cys Leu Asn Gly Gly Thr Cys		
335	340	345
His Leu Gly Thr Arg His His Leu Ala Cys Leu Cys Pro Glu Gly		
350	355	360
Phe Thr Gly Leu Tyr Cys Glu Ser Gln Met Gly Gln Gly Thr Arg		
365	370	375
Pro Ser Pro Thr Pro Val Thr Pro Arg Pro Pro Arg Ser Leu Thr		
380	385	390
Leu Gly Ile Glu Pro Val Ser Pro Thr Ser Leu Arg Val Gly Leu		
395	400	405

Gln Arg Tyr Leu Gln Gly Ser Ser Val Gln Leu Arg Ser Leu Arg  
410 415 420  
Leu Thr Tyr Arg Asn Leu Ser Gly Pro Asp Lys Arg Leu Val Thr  
425 430 435  
Leu Arg Leu Pro Ala Ser Leu Ala Glu Tyr Thr Val Thr Gln Leu  
440 445 450  
Arg Pro Asn Ala Thr Tyr Ser Val Cys Val Met Pro Leu Gly Pro  
455 460 465  
Gly Arg Val Pro Glu Gly Glu Ala Cys Gly Glu Ala His Thr  
470 475 480  
Pro Pro Ala Val His Ser Asn His Ala Pro Val Thr Gln Ala Arg  
485 490 495  
Glu Gly Asn Leu Pro Leu Leu Ile Ala Pro Ala Leu Ala Ala Val  
500 505 510  
Leu Leu Ala Ala Leu Ala Ala Val Gly Ala Ala Tyr Cys Val Arg  
515 520 525  
Arg Gly Arg Ala Met Ala Ala Ala Ala Gln Asp Lys Gly Gln Val  
530 535 540  
Gly Pro Gly Ala Gly Pro Leu Glu Leu Glu Gly Val Lys Val Pro  
545 550 555  
Leu Glu Pro Gly Pro Lys Ala Thr Glu Gly Gly Glu Ala Leu  
560 565 570  
Pro Ser Gly Ser Glu Cys Glu Val Pro Leu Met Gly Phe Pro Gly  
575 580 585  
Pro Gly Leu Gln Ser Pro Leu His Ala Lys Pro Tyr Ile  
590 595

<210> 70

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 70

ccctccactg cccccaccgac tg 22

<210> 71

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 71  
cggttctggg gacgttaggg ctcg 24

<210> 72  
<211> 25  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 72  
ctgcccacgg tccacacctgc tcaat 25

<210> 73  
<211> 45  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 73  
aggactgccc accgtccacc tgccctcaatg ggggcacatg ccacc 45

<210> 74  
<211> 45  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 74  
acgcaaagcc ctacatctaa gccagagaga gacagggcag ctggg 45

<210> 75  
<211> 1077  
<212> DNA  
<213> Homo Sapien

<400> 75  
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cgccccgcca cctccttgct accccactct tgaaaccaca gctgttggca 100  
gggtccccag ctcatgccag cctcatctcc tttcttgcta gcccccaaag 150  
ggcctccagg caacatgggg ggccccagtca gagagccggc actctcagg 200  
gccctctggc tgagttgggg ggcagctctg ggggcctgtgg cttgtgccat 250  
ggctctgctg acccaacaaa cagagctgca gagcctcagg agagaggtga 300  
gccggctgca ggggacagga ggcccctccc agaatgggaa agggtatccc 350  
tggcagagtc tccccggagca gagttccgat gcccttggaaag cctggggagaa 400

tggggagaga tccccggaaaa ggagagcagt gtcacccaa aaacagaaga 450  
agcagcactc tgtcctgcac ctggttccca ttaacgccac ctccaaggat 500  
gactccgatg tgacagaggt gatgtggcaa ccagcttta ggctgggag 550  
aggcctacag gcccaaggat atggtgtccg aatccaggat gctggagttt 600  
atctgctgta tagccaggc ctgtttcaag acgtgacttt caccatgggt 650  
caggtggtgt ctcgagaagg ccaaggaagg caggagactc tattccgatg 700  
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gcccgggtgt cttccattta caccaagggg atattctgag tgtcataatt 800  
ccccgggcaa gggcgaaact taacctctct ccacatggaa cttccctggg 850  
gtttgtgaaa ctgtgattgt gttataaaaa gtggctccca gcttggaaaga 900  
ccaggggtggg tacatactgg agacagccaa gagctgagta tataaaggag 950  
aggaaatgtg caggaacaga ggcacatctcc tgggtttggc tccccgttcc 1000  
tcacttttcc ctttccatcc ccacccctca gactttgatt ttacggatat 1050  
cttgcttctg ttccccatgg agctccg 1077

<210> 76  
<211> 250  
<212> PRT  
<213> Homo Sapien

<400> 76  
Met Pro Ala Ser Ser Pro Phe Leu Leu Ala Pro Lys Gly Pro Pro  
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Gly Asn Met Gly Gly Pro Val Arg Glu Pro Ala Leu Ser Val Ala  
20 25 30  
Leu Trp Leu Ser Trp Gly Ala Ala Leu Gly Ala Val Ala Cys Ala  
35 40 45  
Met Ala Leu Leu Thr Gln Gln Thr Glu Leu Gln Ser Leu Arg Arg  
50 55 60  
Glu Val Ser Arg Leu Gln Gly Thr Gly Gly Pro Ser Gln Asn Gly  
65 70 75  
Glu Gly Tyr Pro Trp Gln Ser Leu Pro Glu Gln Ser Ser Asp Ala  
80 85 90  
Leu Glu Ala Trp Glu Asn Gly Glu Arg Ser Arg Lys Arg Arg Ala  
95 100 105  
Val Leu Thr Gln Lys Gln Lys Lys Gln His Ser Val Leu His Leu  
110 115 120

Val Pro Ile Asn Ala Thr Ser Lys Asp Asp Ser Asp Val Thr Glu  
125 130 135  
Val Met Trp Gln Pro Ala Leu Arg Arg Gly Arg Gly Leu Gln Ala  
140 145 150  
Gln Gly Tyr Gly Val Arg Ile Gln Asp Ala Gly Val Tyr Leu Leu  
155 160 165  
Tyr Ser Gln Val Leu Phe Gln Asp Val Thr Phe Thr Met Gly Gln  
170 175 180  
Val Val Ser Arg Glu Gly Gln Gly Arg Gln Glu Thr Leu Phe Arg  
185 190 195  
Cys Ile Arg Ser Met Pro Ser His Pro Asp Arg Ala Tyr Asn Ser  
200 205 210  
Cys Tyr Ser Ala Gly Val Phe His Leu His Gln Gly Asp Ile Leu  
215 220 225  
Ser Val Ile Ile Pro Arg Ala Arg Ala Lys Leu Asn Leu Ser Pro  
230 235 240  
His Gly Thr Phe Leu Gly Phe Val Lys Leu  
245 250

<210> 77  
<211> 2849  
<212> DNA  
<213> Homo Sapien

<400> 77  
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gggggggacc tgtggctgct cgtaccgcgc cccaccctcc tcttctgcac 150  
tgccgtcctc cggaagacct tttccctgc tctgttctc tcaccgagtc 200  
tgtgcatcgc cccggacctg gcccggagga ggcttggccg gcgggagatg 250  
ctctaggggc ggcgcgggag gagcggccgg cggacggag ggccceggcag 300  
gaagatgggc tcccgtggac agggacttt gctggcgtac tgcctgctcc 350  
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gaacacgcagg agtgggaggg gactgaggag ctgccgtcgc ctccggacca 450  
tgccgagagg gctgaagaac aacatgaaaa atacaggccc agtcaggacc 500  
aggggctccc tgcttccgg tgcttgcgt gctgtgaccc cggtacctcc 550  
atgtacccgg cgaccgcgt gccccagatc aacatcacta tcttgaaagg 600  
ggagaagggt gaccgcggag atcgaggcct ccaaggaaaa tatggcaaaa 650

caggctcagc aggggccagg ggccacactg gacccaaagg gcagaaggc 700  
tccatggggg cccctggga gcggtgcaag agccactacg ccgcctttc 750  
ggtggccgg aagaagccca tgcacagcaa ccactactac cagacggtga 800  
tcttcgacac ggagttcgtg aacctctacg accacttcaa catgttcacc 850  
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gcacacctgg aaccagaagg agacctacct gcacatcatg aagaacgagg 950  
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cctacatcac cttcagtggc tacctggtca agcacgcac cgagccctag 1150  
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ctaaagggtct caaaaggagc aaagtaaacc gtggaggaca aagaaaagg 1550  
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ctccccccage tctttccaga aaacattaaa ctcagaattt tgtttcaa 2849

<210> 78

<211> 281

<212> PRT

<213> Homo Sapien

<400> 78

Met Gly Ser Arg Gly Gln Gly Leu Leu Leu Ala Tyr Cys Leu Leu  
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Leu Ala Phe Ala Ser Gly Leu Val Leu Ser Arg Val Pro His Val  
20 25 30

Gln Gly Glu Gln Gln Glu Trp Glu Gly Thr Glu Glu Leu Pro Ser  
35 40 45

Pro Pro Asp His Ala Glu Arg Ala Glu Glu Gln His Glu Lys Tyr  
50 55 60

Arg Pro Ser Gln Asp Gln Gly Leu Pro Ala Ser Arg Cys Leu Arg  
65 70 75

Cys Cys Asp Pro Gly Thr Ser Met Tyr Pro Ala Thr Ala Val Pro  
80 85 90

Gln Ile Asn Ile Thr Ile Leu Lys Gly Glu Lys Gly Asp Arg Gly  
95 100 105

Asp Arg Gly Leu Gln Gly Lys Tyr Gly Lys Thr Gly Ser Ala Gly

110 115 120

Ala Arg Gly His Thr Gly Pro Lys Gly Gln Lys Gly Ser Met Gly  
125 130 135

Ala Pro Gly Glu Arg Cys Lys Ser His Tyr Ala Ala Phe Ser Val  
140 145 150

Gly Arg Lys Lys Pro Met His Ser Asn His Tyr Tyr Gln Thr Val  
155 160 165

Ile Phe Asp Thr Glu Phe Val Asn Leu Tyr Asp His Phe Asn Met  
170 175 180

Phe Thr Gly Lys Phe Tyr Cys Tyr Val Pro Gly Leu Tyr Phe Phe  
185 190 195

Ser Leu Asn Val His Thr Trp Asn Gln Lys Glu Thr Tyr Leu His  
200 205 210

Ile Met Lys Asn Glu Glu Val Val Ile Leu Phe Ala Gln Val  
215 220 225

Gly Asp Arg Ser Ile Met Gln Ser Gln Ser Leu Met Leu Glu Leu  
230 235 240

Arg Glu Gln Asp Gln Val Trp Val Arg Leu Tyr Lys Gly Glu Arg  
245 250 255

Glu Asn Ala Ile Phe Ser Glu Glu Leu Asp Thr Tyr Ile Thr Phe  
260 265 270

Ser Gly Tyr Leu Val Lys His Ala Thr Glu Pro  
275 280

<210> 79

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 79

tacaggccca gtcaggacca gggg 24

<210> 80

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 80

ctgaagaagt agaggccggg cacg 24

<210> 81

<211> 45  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic oligonucleotide probe  
  
<400> 81  
cccggtgctt gcgctgctgt gaccccgta cctccatgta cccgg 45  
  
<210> 82  
<211> 2284  
<212> DNA  
<213> Homo Sapien  
  
<400> 82  
gcggagcatc cgctgcggtc ctgcggaga ccccccgcgcg gattgcggg 50  
tccttccgc gggcgcgaca gagctgtcct cgcacctgga tggcagcagg 100  
ggcggccgggg tcctctcgac gccagagaga aatctcatca tctgtgcagc 150  
cttcttaaag caaactaaga ccagagggag gattatcctt gacctttgaa 200  
gaccaaaaact aaactgaaat ttaaaatgtt cttcggggaa gaagggagct 250  
tgacttacac tttggtaata atttgcttcc tgacactaag gctgtctgct 300  
agtcaagaatt gcctcaaaaa gagtcttagaa gatgttgca ttgacatcca 350  
gtcatctctt tctaaggaa tcagaggcaa tgagccgta tataactcaa 400  
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tctcagcctc ccacgaccct catttctaca gtttttacac gggctgcggc 1100  
tacactccaa gcaatggcta caacagcagt tctgactacc acctttcagg 1150  
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ggtcaggctg gtctcaaact cctgacctag tgatccaccc tcctcggcct 1900  
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gttttatgtt tgggttttga gaaggaaatga agtgggaacc aaatttaggtt 2000  
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tggttccaga taaaatcaac tgtttatatc aatttctaat ggatttgctt 2200  
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aattaaatat ttgaataaaat cttttgttac tcaa 2284

<210> 83  
<211> 431  
<212> PRT  
<213> Homo Sapien

<400> 83  
Met Phe Phe Gly Gly Glu Gly Ser Leu Thr Tyr Thr Leu Val Ile  
1 5 10 15

Ile	Cys	Phe	Leu	Thr	Leu	Arg	Leu	Ser	Ala	Ser	Gln	Asn	Cys	Leu
20														30
Lys	Lys	Ser	Leu	Glu	Asp	Val	Val	Ile	Asp	Ile	Gln	Ser	Ser	Leu
35														45
Ser	Lys	Gly	Ile	Arg	Gly	Asn	Glu	Pro	Val	Tyr	Thr	Ser	Thr	Gln
50														60
Glu	Asp	Cys	Ile	Asn	Ser	Cys	Cys	Ser	Thr	Lys	Asn	Ile	Ser	Gly
65														75
Asp	Lys	Ala	Cys	Asn	Leu	Met	Ile	Phe	Asp	Thr	Arg	Lys	Thr	Ala
80														90
Arg	Gln	Pro	Asn	Cys	Tyr	Leu	Phe	Phe	Cys	Pro	Asn	Glu	Glu	Ala
95														105
Cys	Pro	Leu	Lys	Pro	Ala	Lys	Gly	Leu	Met	Ser	Tyr	Arg	Ile	Ile
110														120
Thr	Asp	Phe	Pro	Ser	Leu	Thr	Arg	Asn	Leu	Pro	Ser	Gln	Glu	Leu
125														135
Pro	Gln	Glu	Asp	Ser	Leu	Leu	His	Gly	Gln	Phe	Ser	Gln	Ala	Val
140														150
Thr	Pro	Leu	Ala	His	His	His	Thr	Asp	Tyr	Ser	Lys	Pro	Thr	Asp
155														165
Ile	Ser	Trp	Arg	Asp	Thr	Leu	Ser	Gln	Lys	Phe	Gly	Ser	Ser	Asp
170														180
His	Leu	Glu	Lys	Leu	Phe	Lys	Met	Asp	Glu	Ala	Ser	Ala	Gln	Leu
185														195
Leu	Ala	Tyr	Lys	Glu	Lys	Gly	His	Ser	Gln	Ser	Ser	Gln	Phe	Ser
200														210
Ser	Asp	Gln	Glu	Ile	Ala	His	Leu	Leu	Pro	Glu	Asn	Val	Ser	Ala
215														225
Leu	Pro	Ala	Thr	Val	Ala	Val	Ala	Ser	Pro	His	Thr	Thr	Ser	Ala
230														240
Thr	Pro	Lys	Pro	Ala	Thr	Leu	Leu	Pro	Thr	Asn	Ala	Ser	Val	Thr
245														255
Pro	Ser	Gly	Thr	Ser	Gln	Pro	Gln	Leu	Ala	Thr	Thr	Ala	Pro	Pro
260														270
Val	Thr	Thr	Val	Thr	Ser	Gln	Pro	Pro	Thr	Thr	Leu	Ile	Ser	Thr
275														285
Val	Phe	Thr	Arg	Ala	Ala	Ala	Thr	Leu	Gln	Ala	Met	Ala	Thr	Thr
290														300
Ala Val Leu Thr Thr Phe Gln Ala Pro Thr Asp Ser Lys Gly														

305 310 315

Ser Leu Glu Thr Ile Pro Phe Thr Glu Ile Ser Asn Leu Thr Leu  
320 325 330

Asn Thr Gly Asn Val Tyr Asn Pro Thr Ala Leu Ser Met Ser Asn  
335 340 345

Val Glu Ser Ser Thr Met Asn Lys Thr Ala Ser Trp Glu Gly Arg  
350 355 360

Glu Ala Ser Pro Gly Ser Ser Ser Gln Gly Ser Val Pro Glu Asn  
365 370 375

Gln Tyr Gly Leu Pro Phe Glu Lys Trp Leu Leu Ile Gly Ser Leu  
380 385 390

Leu Phe Gly Val Leu Phe Leu Val Ile Gly Leu Val Leu Leu Gly  
395 400 405

Arg Ile Leu Ser Glu Ser Leu Arg Arg Lys Arg Tyr Ser Arg Leu  
410 415 420

Asp Tyr Leu Ile Asn Gly Ile Tyr Val Asp Ile  
425 430

<210> 84

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 84

agggaggatt atccttgacc tttgaagacc 30

<210> 85

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

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cattccagat gcacccctgt ccagtgcgtc ctatagcatc cgccagcatcg 150  
gggagaggcc tgtcctcaaa gctccagtcc ccaaaaggca aaaatgtgac 200  
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gccccatattt gatgagtatt ttgggttgt tggaaaccaa tgaacatTTG 850  
ctagttgtat caaatcttgg tacgcagttat ttttataccca gtatTTTatG 900  
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<212> PRT

<213> Homo Sapien

<400> 91

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Phe Ala Ser Leu Cys Ala Trp Tyr Ser Gly Tyr Leu Leu Ala Glu  
20 25 30

Leu Ile Pro Asp Ala Pro Leu Ser Ser Ala Ala Tyr Ser Ile Arg  
35 40 45

Ser Ile Gly Glu Arg Pro Val Leu Lys Ala Pro Val Pro Lys Arg  
50 55 60

Gln Lys Cys Asp His Trp Thr Pro Cys Pro Ser Asp Thr Tyr Ala  
65 70 75

Tyr Arg Leu Leu Ser Gly Gly Arg Ser Lys Tyr Ala Lys Ile  
80 85 90

Cys Phe Glu Asp Asn Leu Leu Met Gly Glu Gln Leu Gly Asn Val  
95 100 105

Ala Arg Gly Ile Asn Ile Ala Ile Val Asn Tyr Val Thr Gly Asn  
110 115 120

Val Thr Ala Thr Arg Cys Phe Asp Met Tyr Glu Gly Asp Asn Ser  
125 130 135

Gly Pro Met Thr Lys Phe Ile Gln Ser Ala Ala Pro Lys Ser Leu  
140 145 150

Leu Phe Met Val Thr Tyr Asp Asp Gly Ser Thr Arg Leu Asn Asn  
155 160 165

Asp Ala Lys Asn Ala Ile Glu Ala Leu Gly Ser Lys Glu Ile Arg  
170 175 180

Asn Met Lys Phe Arg Ser Ser Trp Val Phe Ile Ala Ala Lys Gly  
185 190 195

Leu Glu Leu Pro Ser Glu Ile Gln Arg Glu Lys Ile Asn His Ser  
200 205 210

Asp Ala Lys Asn Asn Arg Tyr Ser Gly Trp Pro Ala Glu Ile Gln  
215 220 225

Ile Glu Gly Cys Ile Pro Lys Glu Arg Ser  
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